

ANTIFUNGAL COMPOSITIONS
AND METHODS OF TREATMENT THEREWITH

ABSTRACT OF THE DISCLOSURE

The invention is an aqueous or aqueous/alcoholic solution of a transition metal halide, a transition metal oxyhalide, and/or the hydrolysis products thereof as an antifungal composition and method of treating fungal infections therewith. The composition may be used for humans and/or animals in need of topical antifungal treatment. The invention is particularly adapted to use for onychomycotic infections. The transition metal is selected from the groups consisting of copper, zinc, gallium, germanium, silver, tin and mixtures thereof (mixed metal compounds such as $[\text{SnZnF}_4]$), which can be in any oxidation state (other than that of the totally reduced metal). The halide is selected from the group consisting of fluorine, chlorine, bromine, iodide, and mixtures thereof (a mixed halide such as in $[\text{SnF}_2\text{Cl}]$). The transition metal compounds may also be mixed oxides and halides such as in stannous oxyfluoride (Sn_4OF_6) or stannic oxyfluoride (SnOF_2). Since the compounds are in solution, they may also exist as hydrolysis products of any of the foregoing. The compositions have a pH of about 2 to about 4.